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| **Module** | **Lessons** | **Vocab and Tools** | **Standards** |
|  | 1: Positive and Negative Numbers on the Number Line – Opposite Direction and Value  2: Real World Positive and Negative Numbers and Zero  3: Real World Positive and Negative Numbers and Zero  4: The Opposite of a Number  5: The Opposite of a Number’s Opposite  6: Rational Numbers on the Number Line  7: Ordering Integers and Other Rational Numbers  8: Ordering Integers and Other Rational Numbers  9: Comparing Integers and Other Rational Numbers  10: Writing and Interpreting Inequality Statements Involving Rational Numbers  11: Absolute Value – Magnitude and Distance  12: The Relationship Between Absolute Value and Order  13: Statements of Order in the Real World  14: Ordered Pairs  15: Locating Ordered Pairs on the Coordinate Plane  17: Drawing the Coordinate Plane and Points on the Plane  18: Distance on the Coordinate Plane  19: Problem Solving on the Coordinate Plane  **Assessment** | **New or Recently Introduced Terms**  **Absolute Value** (The *absolute value* of a number is the distance between the number and zero on the number line. For example, , , etc.)  **Charge** (A *charge* is the amount of money a person must pay, as in a charge to an account, or a fee charged.)  **Credit** (A *credit* is a decrease in an expense, as in money *credited* to an account. For instance, when a deposit is made into a checking account, the money is *credited* to the account. A credit is the opposite of a debit.)  **Debit** (A *debit* is an increase in an expense or money paid out of an account. For instance, using a debit card to make a purchase will result in an expense, and money will be deducted from the related bank account.)  **Deposit** (A *deposit* is the act of putting money into a bank account.)  **Elevation** (*Elevation* is the height of a person, place, or thing above a certain reference level.)  **Integers** (The numbers ... ,, , , , , , , … are *integers* on the number line.)  **Magnitude** (The *magnitude* is the absolute value of a measurement, given the measurement of a positive or negative quantity.)  **Negative Number** (A *negative number* is a number less than zero.)  **Opposite** (In a position on the other side; for example, negative numbers are the *opposite* direction from zero as positive numbers.)  **Positive Number** (A *positive number* is a number greater than zero.)  **Quadrants** (The four sections of the coordinate plane formed by the intersection of the axes are called *quadrants*.)  **Rational Number** (A *rational number* is a fraction or the opposite of a fraction on the number line.)  **Withdraw** (To *withdraw* is to take away; for example, to take money out of a bank account.)  **Withdrawal** (A *withdrawal* is the act of taking money out of a bank account.)  **Familiar Terms and Symbols[[1]](#footnote-0)**  Coordinate Pair  Coordinate Plane  Fraction  Line of Symmetry  Ordered Pair  Origin  Quadrant  Symmetry  Whole Numbers  -Axis -Coordinate  -Axis -Coordinate  **Suggested Tools and Representations**  Horizontal and Vertical Number Lines  Coordinate Plane | **6.NS.C.5 -** Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of in each situation.  **6.NS.C.6 -** Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.   1. Recognize opposite signs of numbers as indicating locations on opposite sides of on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., , and that is its own opposite. 2. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.   c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.  **6.NS.C.7 -** Understand ordering and absolute value of rational numbers.   1. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret as a statement that is located to the right of on a number line oriented from left to right.* 2. Write, interpret, and explain statements of order for rational numbers in real-world contexts. *Ex: write to express the fact that is warmer than .*   c. Understand the absolute value of a rational number as its distance from on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real‐world situation. *For example, for an account balance of dollars, write to describe the size of the debt in dollars.*  *d.* Distinguish comparisons of absolute value from statements about order. *For example, recognize that an account balance less than dollars represents a debt greater than dollars.*  **6.NS.C.8 -** Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. |

1. [↑](#footnote-ref-0)